

BURLINGTON HIGH SCHOOL COURSE EXPECTATIONS 2011-2012

Course Name: The Calculus

Teacher: Lodish

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Call Back Room: E310

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Course Description: This course is designed for students who may study a math or science field in college. The first part of the course is differential calculus, which covers the concepts of limits, continuity, and derivatives. The second part of the course is integral calculus, which covers various techniques of integration and their applications. The final three-four weeks of the year, we will cover basic probability and counting methods.

The expectation of this course is to complete the first five chapters and selected sections from chapters six through nine. The curriculum will be very similar to that of the AP Calculus course; however, since we don't have to cram for that test in early May, we will have more class periods, allowing us to take our time. Because there are several topics that we cover that the AP class does not, and vice versa, there may be times when we actually seem ahead of the other class.

Connections to State and School Learning Standards: In this course, students will...

- understand and use operations such as reciprocal, exponents, radicals, and absolute values.
- use technology to *assist* in solving complex calculations.
- understand issues of precision, accuracy, and error analysis.
- recognize and represent basic number patterns.
- define and use variables, constants, and unknowns.
- plot points on coordinate planes.
- set up and solve equations symbolically and create and interpret graphs of many kinds.
- understand functions as relationships in which one quantity determines the other.
- understand slope as the rate of change.
- model given situations with functions.
- demonstrate understanding of the history of mathematics and certain mathematicians.
- explain math concepts in written and oral form, using correct notation, representation, and vocabulary.
- apply the processes to real life.

Student Responsibilities: Please be on time and prepared for class everyday. If you are late to school at the beginning of the day, please go to the Grade Office to check in prior to coming to my class. While there will be no penalty towards one's grade for absences, as missing the class is its own consequence. Repeated tardies will be reported to the Grade Office by office referral.

Materials Required for Class: Please bring your textbook, notebook, and graphing calculator (which you will have to purchase on your own, BHS will rent calculators at a rate of \$30 for the year) to class everyday. Homework will be assigned every other class or so, but never the day before a test. Most of the homework will be taken from the problems at the end of each section in the book, I will provide you with a list of problems at the end of that class. These assignments shouldn't take more than 45 - 60 minutes, unless I give you multiple days to work on it. **If it takes you longer than that you need to see me for help in clarifying the material. This is what call back is for; please make use of it.** I will not tolerate whines of 'it took me three hours to do the homework...' ok?

CALL BACK- I will use call back if you miss material. Failure to show up to call back when requested will result in Saturday school. Call back is for your benefit, use it.

Typical Day and Classroom Routines: The first ten to fifteen minutes of every class is spent on going over the previous night's homework. Homework assignments will be collected. This is followed by a two or three question quiz on the previous night's homework. These quizzes are very short, are similar questions to the book, and are graded on a ten point scale, with partial credit given. After the quiz, I will teach for about 45 minutes, and then you will be expected to work on a handful of problems individually or in small groups for practice. Finally, there may be 5 - 10 minutes at the end of every class to start the homework or you are encouraged to ask questions.

Grading: Your grade is calculated as follows:

- 25% **daily** quizzes (10 - 12 every quarter, with the worst score removed)
- 30% homework (3-4 every quarter, with the worst score removed)
- 45% in-class tests / take-home tests (25% - 20 % split)

I will not penalize you for incorrect answers that were a result of careless mistakes, but will for those who make larger errors. All homework in this class will be done in pencil, 10 points penalties will occur otherwise (this is my **only** strict rule!!). Also, you will show all of your work with each problem.

There will be two tests for each unit.

Absences and Make-Up Work: If you are absent from a class, I will make a copy of that day's notes at your request. There is no penalty for a late homework assignment due to an excused absence. Otherwise, late homework is accepted for about a few weeks, at a cost of 10 points per week that it is late.

Class Rules and Expectations:

- we *will* be learning things in the fourth quarter and there will be homework, so don't ask!
- although this is my classroom, other teachers also use it, so please leave it as you found it.
- you may eat or drink in the classroom, but I will not allow you to go to the cafeteria ever.
- respect myself and other students while they are speaking.
- do not touch any computers, cupboards, windows, etc. without my permission.
- you are expected to participate often. The class goes by faster, becomes more interesting, and you'll understand more.
- finally, I encourage all of you to work together on homework assignments and take-home tests, but don't simply copy a friend's assignment, as quizzes and in-class tests will be an accurate assessment of what you really know.

Extra Help and Call Back: I have free blocks Blue Day Block 3 and White Day Blocks 3. I will likely be in the Math Department office next to my classroom during those times, please come if you have any questions.

Parents and Guardians: Please signify that you have read the course expectations by signing below. If you would like to provide information about your student that you think would be helpful to your student's success in this class, please write me below. The **BHS Open House** will be **Thursday, October 6th from 6:30-8:30**. I look forward to meeting you and sharing additional information about this course.

Parent Signature _____ Date _____

Parent Contact Information: Phone _____ Email Address _____

Information You Would Like Me To Know About Your Student: